IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application Of:	Attorney Docket No.: 52493.000059
Charles A. HUDSON *et al.*	Group Art Unit: 2122
Application Number: 09/680,332	Examiner: Chuck O. Kendall
Filed: October 6, 2000	Confirmation No.: 2862
For: SYSTEM AND PROCESS FOR MANAGEMENT OF CHANGES AND MODIFICATIONS IN A PROCESS	**Customer No.: 21967**

MAIL STOP Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUBMISSION OF APPEAL BRIEF

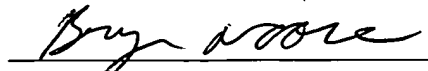
Sir:

In response to the Final Office Action mailed May 20, 2004, Applicant hereby submits the following documents:

- Fee Transmittal Sheet;
- Appeal Brief (in triplicate);
- Check in the amount of $500.00 for Appeal Brief

Respectfully submitted,
Hunton & Williams LLP

Dated: December 20, 2004

By: 
Bryan F. Moore
Registration No. 52,044

Hunton & Williams LLP
Intellectual Property Department
1900 K Street, N.W., Suite 1200
Washington, DC 20006-1109
(202) 955-1500 (telephone)
(202) 778-2201 (facsimile)

BFM:mia

FEE TRANSMITTAL

OIPE
DEC 20 2004
PATENT & TRADEMARK OFFICE

MAIL STOP APPEAL BRIEF - PATENTS

Complete If Known	
Application No.	09/680,332
Filing Date	October 6, 2000
First Named Inventor	Charles A. HUDSON *et al.*
Examiner Name	Chuck O. Kendall
Group Art Unit	2862
Attorney Docket No.	52493.000059

Total Amount Of Payment	($) 500.00

METHOD OF PAYMENT (check one)

1. ☒ The Commissioner for Patents is hereby authorized to charge indicated fees and credit any over payments to **Deposit Account No. 50-0206** in the name of Hunton & Williams LLP.

2. ☐ Check Enclosed. The Commissioner for Patents is hereby authorized to charge any variance between the amount enclosed and the Patent Office charges to **Deposit Account No. 50-0206** in the name of Hunton & Williams LLP, 1900 K Street, N.W., Suite 1200, Washington, D.C. 20006-1109.

FEE CALCULATION

1. **BASIC FILING FEE** ☐ Large Entity ☐ Small Entity

	FEE PAID
Utility Filing Fee	$
Design Filing Fee	$
Plant Filing Fee	$
Reissue Filing Fee	$
Provisional Filing Fee	$

FEE CALCULATION (continued)

3. **ADDITIONAL FEES**

Fee Description		Fee Paid
☐	Surcharge - late filing fee or oath	$
☐	Surcharge - late provisional filing fee or cover sheet	$
☐	_____ Month Extension of Time	$
☐	Notice of Appeal	$
☒	Filing Brief in Support of Appeal	$ 500.00
☐	Request for Oral Hearing	$
☐	Utility Issue Fee (or Reissue) (including Publication Fee, if necessary)	$
☐	Design Issue Fee	$
☐	Plant Issue Fee	$
☐	Petition to Commissioner	$
☐	Petition to Revive (Unavoidable)	$
☐	Petition to Revive (Unintentional)	$
☐	Petitions Related to Provisional Applications	$
☐	Submission of Information Disclosure Statement	$
☐	Filing Submission After Final Rejection	$
☐	Recording Each Patent Assignment Per Property	$
☐	Filing Request for Reexamination	$
☐	Other (specify) _____	$

2. **EXTRA CLAIMS FEES**

CLAIMS AS AMENDED

For	Number Present	Highest Number Paid For	Extra	Rate Large Entity	Rate Small Entity	Amount
TOTAL CLAIMS		20	0	x $ 18.00	x $ 9.00	$ 0.00
INDEPENDENT CLAIMS		3	0	x $ 86.00	x $ 43.00	$ 0.00
MULTIPLE DEPENDENT CLAIMS				$ 290.00	$ 145.00	$ 0.00
TOTAL EXTRA CLAIMS FEES						**$ 0.00**

SUBMITTED BY			Complete (if applicable)	
Typed or Printed Name	Bryan F. Moore		Registration No.	52,044
Signature	Bryan Moore	Date	December 20, 2004	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application Of:	Attorney Docket No.: 52493.000059
Charles A. HUDSON *et al.*	Group Art Unit: 2122
Application Number: 09/680,332	Examiner: Chuck O. Kendall
Filed: October 6, 2000	Confirmation No.: 2862
For: SYSTEM AND PROCESS FOR MANAGEMENT OF CHANGES AND MODIFICATIONS IN A PROCESS	**Customer No.: 21967**

APPEAL BRIEF

12/21/2004 HGUTEMA1 00000037 09680332
01 FC:1402 500.00 OP

TABLE OF CONTENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application Of:	Attorney Docket No.: 52493.000059
Charles A. HUDSON *et al.*	Group Art Unit: 2122
Application Number: 09/680,332	Examiner: Chuck O. Kendall
Filed: October 6, 2000	Confirmation No.: 2862
For: SYSTEM AND PROCESS FOR MANAGEMENT OF CHANGES AND MODIFICATIONS IN A PROCESS	**Customer No.: 21967**

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

In response to the Office Action dated May 20, 2004, finally rejecting pending claims 1-30, appellant respectfully requests that the Board of Patent Appeals and Interferences reconsider and withdraw the rejections of record, and allow the pending claims, which are attached hereto as Appendix I.

I. REAL PARTY IN INTEREST

The real party in interest is Genworth Financial, Inc. to whom the application is currently assigned.

II. RELATED APPEALS AND INTERFERENCES

To the best of appellant's knowledge, there are no related Appeals or Interferences.

III. STATUS OF CLAIMS

Claims 1--30 are pending in this application. The rejections of claims 1-30 are appealed.

IV. STATUS OF AMENDMENTS

No amendments to the claims have been filed subsequent to the final rejection dated May 20, 2004.

V. SUMMARY OF INVENTION

A. Overview

This application relates to a method and system that manages changes within a computer software system. According to the specification, one of the difficulties prior to this invention was:

> ... ensuring that all necessary program modules within a software system have been modified appropriately. Specification, Page 1, Lines 16-18.

The specification continues that:

> Another difficulty may involve measuring the quality of the enhancements being created. Specification, Page 2, Lines 1-2.

In simple terms, the application describes, among other things, a method of managing changes and modifications to a software system by migrating changes to model environment correcting all problems occurring during migration then migrating changes to a production environment Specification, Page 4, Lines 1-8.

A more detailed explanation of the method and system of the present invention is provided below. In the following description, the term "invention" will be used as a shorthand to represent the method and system of the present invention. Neither term is

meant to be a substantive limitation on the claims of the patent application.

B. System Elements

The system elements that make up the invention are depicted in Figure 11. As can be seen from Figure 11, according to one embodiment guide 3 comprises multiple requestor devices (or "computers") used by a plurality of requestors to connect to a network through multiple connector providers (CPs). Specification, Page 30, Lines 10-14. The system further includes a central controller module 812 that may contain a connection to the network through a transmitter module and a receiver module. The central controller module 812 permits the requestor devices to interact with various services provided by the system. Specification, Page 31, Lines 17-30. The central controller module 812 is connected to a processor 816 that performs various processing functions required in the practice of the invention. Specification, Page 31, Lines 9-11, Figure 11.

C. Change Management Process

First, the developer makes enhancements to the software system. Specification, Page 4, Lines 11-12. A quality assurance module evaluates the enhancement. Specification, Page 4, Lines 22-23. The quality assurance module ensures that quality requirements are met by the enhancement such as robustness or error reduction. Specification, Page 4, Lines 22-27. The enhancement is then analyzed for conformity with the model system which may include reviewing source control data, determining a schedule, determining a distribution, reviewing operator instructions, or reviewing special instructions. Specification, Page 5, Lines 13-20. According to one embodiment, the analysis may include reviewing source control data, job control language.

Specification, Page 5, Lines 14-17.

According to one embodiment, a schedule for migration of the enhancement is determined or/and a distribution (such as what program module (s) or office(s) will receive an enhancement) for the enhancement is determined. Specification, Page 5, Lines 17-20. Next, a conflict check may be performed. Specification, Page 6, Lines 18-22. Next, preparation for migration to a model system may be performed such as making sure information necessary for migration is necessary or consulting a production turnover tool. Specification, Page 6, Lines 23-30. The steps above beginning with the quality assurance step are repeated for migration into the production system. Specification, Page 7, Line 19 - Page 10, Line 2.

VI. ISSUES

There are two issues on appeal:

a) Are claims 1-3, 5-7, 9-18, 20, 21, 22, 24-30 unpatenable under 35 U.S.C. § 103(a) over Hossain et al. United States Patent Number 5,581,749 (hereinafter Hossain), in view of Strysniewicz et al. United States Patent Number 6,591,417 (hereinafter Strysniewicz).?

a) Are claims 4, 8, 19, and 23 unpatenable under 35 U.S.C. § 103(a) over Hossain et al., in view of Strysniewicz et al., in view of May et al. United States Patent Number 5,999,741 (hereinafter May).?

VII. ARGUMENT

The combination of Hossain and Strysniewicz is used as the foundation for the main rejection of the rejections present in the Final Office Action dated May 20, 2004. That foundation, however, is inherently flawed. First, Hossain is not relevant or even

analogous to the invention because it teaches nothing about software migration. However, the major fissure in the Hossain/Strysniewicz foundation is the fact that combination does not teach or suggest all of the limitations of any of the independent claims. Indeed, that the combination does not teach or suggest one of the principal elements of each of the independent claims - a separate conformity and quality assurance step. Additionally, the mortar used to hold together the combination of Hossain and Strysniewicz, *i.e.*, the motivation to combine their teachings, is non-existent.

It is on this shaky foundation that the Final Office Action builds a house of cards out of an additional rejection. This additional rejection fails in its own right and, additionally, because all are built on the defective foundation of Hossain and Strysniewicz.

A. Summary Of Hossain and Strysniewicz And The Rejection Based Thereon

1. Hossain

Hossain is a database management system directed to a system for updating records in multiple transaction processing systems. To that end, Hossain maintains a "global code database" which controls the creation of records in remote systems. Hossain, Abstract. Hossain accomplishes this by creating records in the global code system and distributing them to one or more of the transaction processing systems in real time. Hossain Abstract. The global codes system also maintains "shadow code systems" which contain a read only copy of a subset of all the records in the global codes system. Hossain abstract. Hossain is concerned with maintaining the consistency of records across multiple systems not the quality and compatibility of

programs in a single production environment. Hossain is not even remotely related to upgrading and migrating programs as disclosed in the present specification and recited in each independent claim.

2. Strysniewicz

Strysniewicz is directed to testing the compatibility of a program upgrade with an existing application by installing the upgrade to a temporary space and testing the upgrade. If the upgrade is successful in the temporary space it is installed in a permanent space. If the test fails a notification is sent to a user. Strysniewicz, Abstract. Strysniewicz does not teach or suggest the concept of separate quality assurance and conformity. Strysniewicz is only cited for the concept of migrating to a model environment and then to a production environment.

3. The Combination of Hossain and Strysniewicz

Claims 1-3, 5-7, 9-18, 20, 21, 22, 24-30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hossain et al. United States Patent Number 5,581,749 (hereinafter Hossain), in view of Strysniewicz et al. United States Patent Number 6,591,417 (hereinafter Strysniewicz).

According to the flawed reading of Hossain in the Final Office Action:

> Regarding claim 1, a process for managing a migration of one or more enhancements of a production software system, where the production software system comprises a plurality of program modules, the process comprising the steps of:
>
> receiving at least one enhancement from the development, wherein the at least one enhancement is an enhancement of software code (See 1:23-26, for software (DMBS), also see updating the software which is the global code system 2:65 - 3: 25);
>
> receiving approval of the quality at least one enhancement

> from a quality assurance module (14:5-11, see verify utility and update module); notifying at least one entity of the migration of the at least one enhancement to the production software system (14:16-19, see notifying about update(enhancement)); analyzing the at least one enhancement to ensure conformity with the production software system (14:13, for analyze see verify);
>
> migrating the at least one enhancement to the production software (13:15-20, see distribute module for migrating); notifying at least one entity of the migration of the at least one enhancement to the production system (14:16-19, see notifying about update(enhancement). Final Office Action dated May 20, 2004, Page 2-3.

As shall be demonstrated below in Section B.2, a close examination of this cited material reveals that Hossain does not come close to disclosing or suggesting what the Final Office Action has proposed.

The Final Office Action does go on to concede the following:

> Hossain doesn't explicitly disclose migrating the at least one enhancement to the model software system, where the model software system comprises an equivalent of the production software system and analyzing the at least one enhancement to ensure conformity with the model software system. Final Office Action, Page 3 (emphasis added).

In order to fill the acknowledged gap in Hossain, the Office Action introduces the Strysniewicz patent. The Final Office Action misreads Strysniewicz as allegedly teaching "this feature in a similar configuration." Final Office Action, Page 3.

After providing this modification/characterization of Strysniewicz, the Office Action alleges a conclusion of obviousness as follows:

> It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Hossain and Strysniewicz because, use of models and test systems or simulations during updating makes (sic) system ensures fewer errors and system maintainability. Final Office Action, Page 3.

B. Claims 1-3, 5-7, 9-18, 20, 21, 22, 24-30 Are Not *Prima Facie* Obvious Based On The Combination Of Hossain And Strysniewicz

1. The Standard For *Prima Facie* Obviousness

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ.2d 1438 (Fed. Cir. 1991).

2. The Combination of Hossain And Strysniewicz Does Not Teach Or Suggest All Limitations Of Claim 1

Claim 1 is directed to "[a] process for managing a migration of one or more enhancements of a production software system." To that end claim 1 recites, among other things:

> receiving at least one enhancement from the developer, wherein the at least one enhancement is an enhancement to software code;
>
> receiving approval of the quality of the at least one enhancement from a quality assurance module;
>
> analyzing the at least one enhancement to ensure conformity with the model software system;

The Final Office Action alleges that Hossain teaches receiving an enhancement

of software code by database management system (DBMS) software at 1:23-26 and "updating the software which is the global code system" at 2:65-3:25. Final Office Action, Page 2. Appellant disagrees. Column 1, Lines 23-26 teach the following:

> A database management system is a set of software programs that controls the organization, storage and retrieval of data (also called codes) in a database. The database management system handles the repetitive tasks involved with data processing so that a user is free to perform higher level functions. Hossain, Col. 1, Lines 23-26.

As can be seen from the actual text of Hossain, Col. 3, Lines 23-26 teaches neither what the Office Action alleges nor what is claimed in independent claims 1, and 16. Specifically, Hossain does not teach or suggest the receiving an enhancement to software code. The above passage describes a software system that controls the organization, storage and retrieval of data (also called codes). The data or codes are not in themselves software and are not described as such anywhere in Hossain. The codes are also not described as updating the database management software system itself but rather the database it manages. The Office Action also cites Column 2, Line 63 - Column 3, Line. 25 which teaches the following:

> The invention is a database management system, called a "global code system," which coordinates the code maintenance (i.e., sharing of data) between transaction processing systems. All requests to modify (i.e., create, update or delete) data in the transaction processing environment of the present invention are made through the global code system.
>
> The global code system processes these requests by performing the modification on a global code database and by directing each transaction processing system which uses the modified data to perform the same modification. This is

> done in real time. Thus, the global code database maintains a current copy of each record stored in any transaction processing database. This controlled data redundancy ensures both data accuracy and data currency.
>
> In addition to directing the transaction processing systems to perform requested data modifications, the global code system directs appropriate shadow code systems to perform the modifications. A shadow code system is a database management system which is similar to the global code system, except that its data can only be modified by the global code system. One shadow code system resides in each "geographic area" of the transaction processing environment. A geographic area is a locale served by one or more transaction processing systems. Each shadow code system receives all code maintenance operations distributed to any transaction processing system in its geographic area. Thus, each shadow code system provides a complete, local, current copy of all data used in its geographic area.

As explained above, Hossain is directed to a database management system, and as such, is not concerned with migrating software or maintaining the quality and conformity of software enhancements. The Final Office Action equates the term "global code," which Hossain defines as "data," to "program module" or "software code." However, Hossain acknowledges the difference between maintaining data records and software code. Hossain teaches away from updating any source code at Column 4, Lines 33-42.

> The global code system uses a large amount of configuration data which specifies, for example, the security profiles of authorized users, the physical layout of the transaction processing environment, and details about the transaction processing systems. These values would be difficult to change if hard coded, as any change would necessitate modifying the source code of the global code system. Accordingly, in the present invention such data are stored in configuration tables. The values in the tables can be changed without modifying or re-compiling the source code.

Rather, Hossain is concerned with "data modification operations." Hossain, Col. 7, Lines 7-13. Hossain does not receive "at least one enhancement from the developer, wherein the at least one enhancement is an enhancement to software code." Hossain does not receive "approval of the quality of the at least one enhancement from a quality assurance module." And, Hossain does not analyze "the at least one enhancement to ensure conformity with the model software system."

The Final Office Action alleges the verify function at 14:5-13 of Hossain reads on both the "quality assurance module" and the "analyzing to ensure conformity" limitations of claims 1 and 16. Final Office Action, Page 2. Appellant disagrees. Column 14, Lines 5-13 teach the following:

> If the user 814 sends a request to terminate, the update module 1216 stops (see step 1526). Otherwise, the update module 1216 has the verify utility 1234 check the field values (see step 1528). If the verify utility 1234 returns an error status (see step 1530), the update module 1216 sends an error message to the user 814 (see step 1532), and then returns to step 1524 to process new field values or a request to terminate.
>
> Once the field values have been verified, the update module 1216 updates the record in the global code database 412 (see step 1534 of FIG. 15B).

Additionally, the verify utility as described as follows:

> The verify utility determine whether requested modifications to a record comply with any modification restrictions imposed on the requester for the record. The verify utility determines such restrictions by invoking the application protection mechanism. The verify utility returns an indication that the values are permissible or an indication that they are not permissible. (Col. 12, lns. 56-63 (Fig. citations omitted))

Claims 1 and 16 recite that approval of the quality of the at least one enhancement is received from a quality assurance module. The verify function checks

only restriction on the requestor of the record. In claims 1 and 16, the quality assurance and the conformity check are two separate checks on the enhancement. In Hossain, the verify function does not approve the quality of the record, it checks only restrictions on the requestor of the record. The verify function does not evaluate the quality of the record itself but rather whether the record is restricted due to a limitation on the requestor. Additionally, quality is a term properly used to describe software rather than a data record. Data is generally either correct or in error. Thus, Hossain does not teach or suggest receiving approval of the at least one enhancement from a quality assurance module.

Claim 1 continues by reciting migrating the enhancement to a model system and then to a production system. Specifically claim 1 recites:

> migrating the at least one enhancement to the model software system, where the model software system comprises an equivalent of the production software system;
>
> analyzing the migration of the at least one enhancement to the model software system; ...
>
> analyzing the at least one enhancement to ensure conformity with the production software system;
>
> migrating the at least one enhancement to the production software system

As set forth above, the Final Office Action acknowledges that Hossain does not disclose migration to two systems as claimed, but attempts to use Strysniewicz to fill this crack but ignores the fact that Hossain does not perform a quality check. Strysniewicz, like Hossain, does not teach or suggest approval of the quality of the at least one enhancement is received from a quality assurance module as is claimed in claims 1 and 8.

For the sake of completeness, it is worth noting that the Final Office Action is correct in stating that Hossain also does not teach or suggest migration to a model system and then a production system as claimed. Hossain migrates data to multiple geographic locations as is shown in Figure 4 and explained at Col. 6, Lines 44-55. As explained by Hossain, data is distributed to different systems such as an accounting system, an inventory system, etc. which may reside in the U.S. or Europe. Hossain, Col. 6, Lines 44-55. Thus, Hossain does not "[migrate] the at least one enhancement to the model software system, where the model software system comprises an equivalent of the production software system."

3. There Is No Motivation To Combine the Teachings of Hossain and Strysniewicz

There is absolutely no motivation or suggestion to combine the teachings of Hossain and Strysniewicz. Hossain is directed to a database management system. Hossain, Col. 2, Line 66-Col. 3, Line 5. Hossain distributes data to multiple locations and ensures data accuracy and currency. Hossain, Col. 3, Lines 5-13. Hossain teaches away from updating or modifying software code. Col. 4, Lines 33-42. As explained above, Strysniewicz is directed to updating software programs. This is evident from the abstract of Strysniewicz as well as from Figure 1 of Strysniewicz.

In sum, the Office Action fails to make out a *prima facie* case of obviousness because there is no suggestion for the combination, nor the necessary modification to the combination. The Office Action also does not make out a *prima facie* case of obviousness because it fails to disclose a combination that teaches or suggests all of the claimed limitations.

Appellant respectfully requests reversal of the 35 U.S.C. 103 rejection of

claims 1 and 16, and all claims dependent therefrom, based on Hossain in view of Strysniewicz.

4. Dependent Claim 2 and 17 are Not Obvious Over The Combination of Hossain and Strysniewicz

Claim 2 depends from claim 1 and claim 17 depends from claim 16 and both recite that:

> wherein the enhancement is one of a new program module or a modified program module.

As stated above with respect to claim 1, Hossain does not disclose any new or modified program module. As discussed above, Strysniewicz discloses software code but there is no motivation to combine Strysniewicz and Hossain. And, neither Hossain nor Strysniewicz disclose analyzing the conformity and quality of a program module. Thus, the combination of Strysniewicz and Hossain does not teach or suggest all limitations of claims 2 and 17.

Appellant respectfully requests reversal of the 35 U.S.C. 103 rejection of claims 2 and 17, and all claims dependent therefrom, based on Hossain in view of Strysniewicz.

5. Dependent Claim 3 and 18 are Not Obvious Over The Combination of Hossain and Strysniewicz

Claim 3 and 18 recite "reviewing a request for service record associated with the at least one enhancement." The Final Office Action points to the verify and error functions of Hossain as reading on this limitation. As noted above the verify function checks only restrictions on the requestor. A request for service record is a record associated with the enhancement not with the requestor of the enhancement. The error

function is invoked by an error caused by "a communication malfunction, a database error or a program logic error." (Col. 8, lns. 45-47) None of these errors is something that would be included on the request associated with the enhancement. Thus, Hossain does not teach or suggest reviewing a request for service record associated with the at least one enhancement. Strysniewicz does not remedy what Hossain is lacking. Strysniewicz does not disclose requests associated with enhancements. Strysniewicz does not teach or suggest reviewing a request for service record associated with the at least one enhancement.

Appellant respectfully requests reversal of the 35 U.S.C. 103 rejection of claim 3 and 18 based on Hossain in view of Strysniewicz.

6. Dependent Claim 5, 7, 9, 14, 15, 20, 22, 24, 29, and 30 are Not Obvious Over The Combination of Hossain and Strysniewicz

Claim 5 depends from claim 1 and claim 20 depends from claim 16 and both recite:

> reviewing instructions for migrating the at least one enhancement into the model software system.

Claim 9 depends from claim 1 and claim 24 depends from claim 16 and both recite:

> reviewing instructions for migrating the at least one enhancement into the production software system.

Claim 7 depends from claim 1 and claim 22 depends from claim 16 and both recite:

> reviewing a request for services record associated with the at least one enhancement.

Claim 14 depends from claim 1 and claim 29 depends from claim 16 and both

recite:

> preparing the at least one enhancement for migration to the model software system based on the analysis of the at least one enhancement for conformity with the model software system.

Claim 15 depends from claim 1 and claim 30 depends from claim 16 and both recite:

> preparing the at least one enhancement for migration to the production software system based on the analysis of the at least one enhancement for conformity with the production software system.

The Final Office Action alleges that Hossain teaches reviewing instructions for migrating and reviewing a request for services record and preparing the at least one enhancement for migration to the model (or production) software system at Column 21, Line 37. Final Office Action, Page 3. Appellant disagrees. Column 21, Lines 37-39 teach the following:

> An administrative user periodically reviews the abnormal event audit log 525 and attends to any entries which have not been automatically resolved.

As can be seen from the actual text of Hossain, Col. 21, Lines 37-39 teaches neither what the Final Office Action alleges nor what is claimed in claims 5, 7, 9, 14, 15, 20, 22, 24, 29, and 30. Specifically, Hossain does not teach or suggest the reviewing instructions for migrating an enhancement or reviewing a request for services record or preparing the at least one enhancement for migration to the model (or production) software system. The above passage describes an audit log the records errors such as a failure in a communication line in distributing data to a location. Hossain, Col. 21, Lines 20-39. No instructions for migrating an

enhancement or review of a request for services record or preparing the at least one enhancement for migration to the model (or production) software system are suggested by Hossain. Also, Strysniewicz does not disclose what Hossain lacks. Thus, the combination of Strysniewicz and Hossain does not teach or suggest all limitations of claims 5, 7, 9, 14, 15, 20, 22, 24, 29, and 30.

Appellant respectfully requests reversal of the 35 U.S.C. 103 rejection of claims 5, 7, 9, 20, 22 and 24, and all claims dependent therefrom, based on Hossain in view of Strysniewicz.

7. Dependent Claim 6, 10, 21, and 25 are Not Obvious Over The Combination of Hossain and Strysniewicz

Claim 6 and 10 depend from claim 1 and claim 21 and 25 depend from claim 16 and each recite:

> determining a distribution of the at least one enhancement for migration.

The Final Office Action alleges that Hossain teaches determining a distribution of the at least one enhancement for migration. Final Office Action, Page 3. Appellant disagrees. As mentioned above, Hossain discloses distributing data records not program modules Also, although Strysniewicz discloses program modules, it does not disclose determining a distribution for a program module and there is no motivation to combine Strysniewicz and Hossain. Thus, the combination of Strysniewicz and Hossain does not teach or suggest all limitations of claims 6, 10, 21, and 25.

Appellant respectfully requests reversal of the 35 U.S.C. 103 rejection of claims 6, 10, 21, and 25, and all claims dependent therefrom, based on Hossain in

view of Strysniewicz.

8. Dependent Claims 11 and 26 are Not Obvious Over The Combination of Hossain and Strysniewicz

Claim 11 depends from claim 1 and claim 26 depends from claim 16 and each recite notifying at least one entity of the migration to the production software system where the:

> at least one entity comprises one of:
>
> a) the quality assurance module;
>
> b) the developer; and
>
> c) an end user of the production software system.

The Final Office Action alleges that Hossain teaches notification of a program migration. Final Office Action, Page 3. Appellant disagrees. As mentioned above, Hossain discloses distributing data records not program modules Also, although Strysniewicz discloses program modules, it does not disclose notification of a migration for a program module and there is no motivation to combine Strysniewicz and Hossain. Thus, the combination of Strysniewicz and Hossain does not teach or suggest all limitations of claims 11 and 26.

Appellant respectfully requests reversal of the 35 U.S.C. 103 rejection of claims 11 and 26, and all claims dependent therefrom, based on Hossain in view of Strysniewicz.

9. Dependent Claim 12, 13, 27, and 28 are Not Obvious Over The Combination of Hossain and Strysniewicz

Claim 12 and 13 depend from claim 1 and claim 27 and 29 depend from claim 16 and each recite respectively:

> resolving conflicts between the at least one enhancement

and the production software system

AND

resolving conflicts between the at least one enhancement and the model software system

The Final Office Action alleges that Hossain teaches resolving conflicts between the at least one enhancement and the model (or production) software system. Final Office Action, Page 4. Appellant disagrees. As mentioned above, Hossain discloses distributing data records not program modules Also, although Strysniewicz discloses program modules, it does not disclose resolving conflicts between the at least one enhancement and the model (or production) software system and there is no motivation to combine Strysniewicz and Hossain. Strysniewicz discloses determining the compatibility of two applications rather than compatibility with the model or production environment itself. Strysniewicz, Column 2, Lines 34-38. Thus, the combination of Strysniewicz and Hossain does not teach or suggest all limitations of claims 12, 13, 27, and 28.

Appellant respectfully requests reversal of the 35 U.S.C. 103 rejection of claims 12, 13, 27, and 28, and all claims dependent therefrom, based on Hossain in view of Strysniewicz.

C. Dependent Claims 4, 8, 19, and 23 are Not Obvious Based On The Combination of Hossain In View Of Strysniewicz Further In View Of May

Claims 4, 8, 19 and 23 stand rejected under 35 U.S.C. § 103 as allegedly unpatentable over Hossain in view of Strysniewicz further in view of May. Claims 4, 8, 19 and 23 depend from claims 1 and 16 respectively and therefore include all of the limitations of claims 1 and 16. Claims 4, 8, 19 and 23 are thus allowable for the reasons

presented above with respect to claims 1 and 16.

With respect to claims 4 and 19, neither Hossain nor Strysniewicz teach or suggest a process from migrating enhancements that includes:

> determining a schedule for running the at least one enhancement after it is migrated into the model software system

With respect to claim 8 and 23, neither Hossain nor Strysniewicz teach or suggest a process from migrating enhancements that includes:

> determining a schedule for running the at least one enhancement after it is migrated into the production software system

May does not cure this deficiency in the combination of Hossain and Strysniewicz. May discloses a "Remote Installation of Software on a Computing Device." Specifically, the system of May uses "an alternate communication path" to provide a software program to a remote location when a primary communication path is unavailable. May, Abstract. More specifically, May provides whether the alternate communication path is adequate for downloading the software. May, Abstract. May states that "MIS managers can query individual machines to access DMIs and MIF databases on individual machines in order to obtain current information stored therein. Based on this information, MIS managers can schedule upgrades for outdated hardware and software configurations." However, May is not concerned with running a program once it is migrated into a model environment or a production environment which is the equivalent of the model environment or vice versa recited in claims 4, 8, 19 and 23.

Moreover, May does not cure any of the deficiencies in the combination of Hossain and Strysniewicz as outlined above with respect to claims 1, and 16. As

discussed in detail above the combination of Hossain and Strysniewicz does not disclose a system that receives a program module and checks its quality and conformity prior to migration into a model and then a production system recited by claims 1 and 16 (the claims from which claims 4, 13, 14 and 22 depend). Because May does not cure these deficiencies, the combination of Hossain, Strysniewicz and May does not render claims 4, 8, 19 and 23 obvious under § 103.

Finally, Hossain and May are improperly combined. In order to support a § 103 rejection based on a combination of references, the Office Action must provide a sufficient motivation for making the relevant combinations. *See* M.P.E.P. §§ 2142 and 2143.01; *see also In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998) ("When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references."). It is well-settled that an Examiner can "satisfy [the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness] only by showing some *objective teaching* in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) (emphasis added); *see also In re Lee*, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir 2002) ("'deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense'"). As with rejections based on the modification of a single reference, "[b]road conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence [of a motivation to combine]'" and thus do not support rejections based on combining

references. *In re Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617. Without objective evidence of a motivation to combine, the obviousness rejection is the "essence of hindsight" reconstruction, the very "syndrome" that the requirement for such evidence is designed to combat, and without which the obvious rejection is insufficient as a matter of law. *Id.* at 999, 50 USPQ2d at 1617-18.

There is no showing of any objective teaching to combine the references in the Final Office Action. The Final Office Action merely states it would be obvious: "to modify Hossain with May because, scheduling during updating or software enhancing makes applying enhancements to a system more time efficient and less conflicting." This broad, conclusory statement is not sufficient, under the controlling authorities set forth above, to justify combining the teachings of Hossain and May. Indeed, this broad, conclusory statement is nothing more than the Examiner's speculation on what could possibly be achieved if the references could be combined. In fact, a person of ordinary skill in the art would not be motivated to combine the teachings of Hossain and May. Specifically, Hossain attempts to solve the problem of updating records and key values. In contrast, May attempts to deal with updating software. The challenges associated with updating software are different than those associated with updating records. This fact is acknowledged in Hossain at Column 4, Lines 33-42.

Appellant respectfully requests reversal of the rejections of claims 4, 8, 19 and 23 under 35 U.S.C. § 103.

VIII. CONCLUSION

In view of the foregoing, appellant respectfully requests that the Board reverse the prior art rejections set forth in the Action, and allow all of the pending claims.

Respectfully submitted,

December 20, 2004

Bryan F. Moore
Registration No. 52,044

Hunton & Williams LLP
Intellectual Property Department
1900 K Street, N.W., Suite 1200
Washington, DC 20006-1109
(202) 955-1500 (telephone)
(202) 778-2201 (facsimile)

APPENDIX I - Pending Claims

Claim 1. (Previously Amended) A process for managing a migration of one or more enhancements of a production software system, where the production software system comprises a plurality of program modules, the process comprising the steps of:

receiving at least one enhancement from the developer, wherein the at least one enhancement is an enhancement to software code;

receiving approval of the quality of the at least one enhancement from a quality assurance module;

analyzing the at least one enhancement to ensure conformity with the model software system;

migrating the at least one enhancement to the model software system, where the model software system comprises an equivalent of the production software system;

analyzing the migration of the at least one enhancement to the model software system;

analyzing the at least one enhancement to ensure conformity with the production software system;

migrating the at least one enhancement to the production software system; and

notifying at least one entity of the migration of the at least one enhancement to the production software system.

Claim 2. (Original) The process according to claim 1, wherein the enhancement is one of a new program module or a modified program module.

Claim 3. (Original) The process according to claim 1, wherein the step of analyzing the at least one enhancement to ensure conformity with the model software system further comprises reviewing a request for service record associated with the at least one enhancement.

Claim 4. (Previously Amended) The process according to claim 1, wherein the step of analyzing the at least one enhancement to ensure conformity with

the model software system further comprises determining a schedule for running the at least one enhancement after it is migrated into the model software system.

Claim 5. (Original) The process according to claim 1, wherein the step of analyzing the at least one enhancement to ensure conformity with the model software system further comprises reviewing instructions for migrating the at least one enhancement into the model software system.

Claim 6. (Previously Amended) The process according to claim 1, wherein the step of analyzing the at least one enhancement to ensure conformity with the model software system further comprises determining at least on distribution location for the at least one enhancement for migration.

Claim 7. (Original) The process according to claim 1, wherein the step of analyzing the at least one enhancement to ensure conformity with the production software system further comprises reviewing a request for services record associated with the at least one enhancement.

Claim 8. (Previously Amended) The process according to claim 1, wherein the step of analyzing the at least one enhancement to ensure conformity with the production software system further comprises determining a schedule for running the at least one enhancement after it is migrated into the production software system.

Claim 9. (Previously Amended) The process according to claim 1, wherein the step of analyzing the at least one enhancement to ensure conformity with the production software system further comprises reviewing instructions for migrating the at least one enhancement into the production software system.

Claim 10. (Original) The process according to claim 1, wherein the step of analyzing the at least one enhancement to ensure conformity with the production

software system further comprises determining a distribution of the at least one enhancement for migration.

Claim 11. (Original) The process according to claim 1, wherein the at least one entity comprises one of:

a) the quality assurance module;

b) the developer; and

c) an end user of the production software system.

Claim 12. (Original) The process according to claim 1, further comprising the step of resolving conflicts between the at least one enhancement and the model software system.

Claim 13. (Previously Amended) The process according to claim 1, further comprising the step of resolving conflicts between the at least one enhancement and the production software system.

Claim 14. (Original) The process according to claim 1, further comprising the step of preparing the at least one enhancement for migration to the model software system based on the analysis of the at least one enhancement for conformity with the model software system.

Claim 15. (Previously Amended) The process according to claim 1, further comprising the step of preparing the at least one enhancement for migration to the production software system based on the analysis of the at least one enhancement for conformity with the production software system.

Claim 16. (Previously Amended) A system for managing a migration of one or more enhancements of a production software system, where the production software system comprises a plurality of program modules, the system comprising:
a receiver module for:

a) receiving at least one enhancement from the developer, wherein the at least one enhancement is an enhancement to software code; and

b) receiving approval of the quality of the at least one enhancement from a quality assurance module;

a processor module for:

a) analyzing the at least one enhancement to ensure conformity with the model software system;

b) analyzing the migration of the at least one enhancement to the model software system; and

c) analyzing the at least one enhancement to ensure conformity with the production software system; and

a transmitting module for:

a) migrating the at least one enhancement to the model software system, where the model software system comprises an equivalent of the production software system;

b) notifying at least one entity of the migration of the at least one enhancement to the production software system; and

c) migrating the at least one enhancement to the production software system.

Claim 17. (Original) The system according to claim 16, wherein the enhancement is one of a new program module or a modified program module.

Claim 18. (Original) The system according to claim 16, wherein analyzing the at least one enhancement to ensure conformity with the model software system further comprises reviewing a request for service record associated with the at least one enhancement.

Claim 19. (Previously Amended) The system according to claim 16, wherein analyzing the at least one enhancement to ensure conformity with the model

software system further comprises determining a schedule for running the at least one enhancement after it is migrated into the model software system.

Claim 20. (Original) The system according to claim 16, wherein analyzing the at least one enhancement to ensure conformity with the model software system further comprises reviewing instructions for migrating the at least one enhancement into the model software system.

Claim 21. (Previously Amended) The system according to claim 16, wherein analyzing the at least one enhancement to ensure conformity with the model software system further comprises determining at least on distribution location for the at least one enhancement for migration.

Claim 22. (Original) The system according to claim 16, wherein analyzing the at least one enhancement to ensure conformity with the production software system further comprises reviewing a request for services record associated with the at least one enhancement.

Claim 23. (Previously Amended) The system according to claim 16, wherein analyzing the at least one enhancement to ensure conformity with the production software system further comprises determining a schedule for running the at least one enhancement after it is migrated into the production software system.

Claim 24. (Previously Amended) The system according to claim 16, wherein analyzing the at least one enhancement to ensure conformity with the production software system further comprises reviewing instructions for migrating the at least one enhancement into the production software system.

Claim 25. (Original) The system according to claim 16, wherein analyzing the at least one enhancement to ensure conformity with the production software system

further comprises determining a distribution of the at least one enhancement for migration.

Claim 26. (Original) The system according to claim 16, wherein the at least one entity comprises one of:

a) the quality assurance module;

b) the developer; and

c) an end user of the production software system.

Claim 27. (Original) The system according to claim 16, wherein the processor module resolves conflicts between the at least one enhancement and the model software system.

Claim 28. (Previously Amended) The system according to claim 16, wherein the processor module resolves conflicts between the at least one enhancement and ~~in~~ the production software system.

Claim 29. (Original) The system according to claim 16, wherein the processor module prepares the at least one enhancement for migration to the model software system based on the analysis of the at least one enhancement for conformity with the model software system.

Claim 30. (Previously Amended) The system according to claim 16, wherein the processor module prepares the at least one enhancement for migration to the production software system based on the analysis of the at least one enhancement for conformity with the production software system.